It is, therefore, the Applicant's strong opinion that Naughton et al. in view of Sussman et al. and Stephanopouos et al. fail to render claims 1-20 and 51-70 obvious.

PCT Article 33(3)

Naughton et al. in view of Sussman et al., Stephanopouos et al. and Emerson et al.

The examiner has stated that claims 21-50 and 71-88 lack an inventive step under PCT Article 33(3) as being obvious over Naughton et al. in view of Sussman et al. and Stephanopouos et al. and further in view of Emerson et al. The Examiner statements are respectfully traversed.

Naughton et al., Sussman et al. and Stephanopouos et al. are discussed above. Comb screening Emerson et al. Applicant failed to identify where does Emerson et al. teach stem cell expansion in a stromal cell conditioned medium. In effect, Emerson et al. teach away from a conditioned medium in that they teach continuous and fast, or, in the alternative, frequent-periodic medium change by fresh medium resulting by 50 - 100 % daily medium replacement. Indeed, to achieve their results, Emerson et al. added growth factors to the medium.

It is, therefore, the Applicant's strong opinion that Naughton et al. in view of Sussman et al. and Stephanopouos et al. and further in view of Emerson et al. fail to render claims 21-50 and 71-88 obvious.

Respectfully submitted,

SHEINBEIN, Sol Agent for Applicant

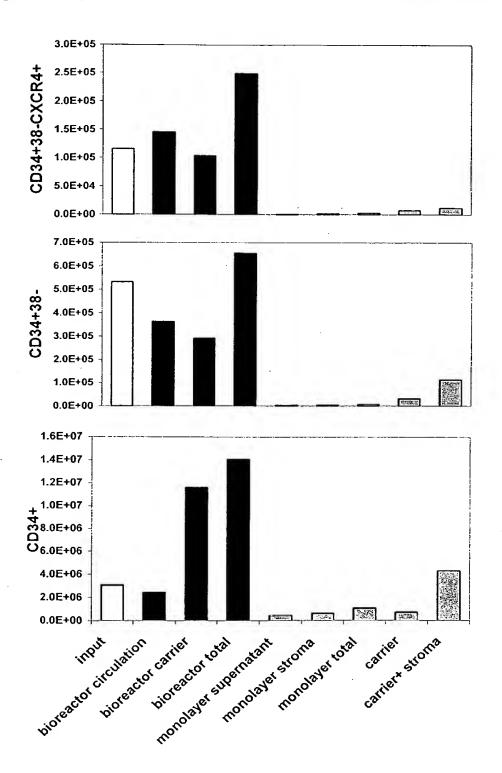
Date: May 24, 2001.

Encl.:

Figure 1; and

Replacement page 59 (replacing pages 59-60).

Figure 1: Expansion of CD34+38-CXCR4+ cells in a static bioreactor:



88. The method of claim 71, wherein the matrix is coated with poly-D-lysine.